IN THE SPECIFICATION

1. Please amend the first paragraph on page 3, lines 6-11, as follows:

Preferably, the multichannel image processor has: a plurality of memories for storing signals input through the plurality of input channels, respectively; a memory controller for selectively outputting the signals stored in the plurality of memories in accordance with a control signal; a coding unit for coding the signals output from the plurality of memories and transmitting the coded signals to the user's computer; and a main controller for controlling the memory controller in accordance with the control signal transmitted from the user's computer.

2. Please amend the paragraphs bridging pages 4-5, from line 12 on page 4 thru line 18 on page 5, as follows:

It is more preferable that the photograph direction manipulation keys are displayed as a mark having a predetermined shape on an initial point in a direction display window for displaying [[a]] direction guide information for guiding a photograph adjust direction[[,]] when the photograph direction manipulation key is not selected, and the multichannel image driver displays the mark after moving the mark in the direction display window in accordance with a dragging direction of a mouse clicked to select the mark, outputs a rotation control signal through the multichannel image processor to the photographing apparatus in order to rotate the photographing apparatus according to the moving direction, and displays the mark to be returned to the initial point when the click is released.

The next menu key is provided for selecting to see a succeeding frame for offering a detailed photograph key capable of adjusting and setting up a detailed function including a photographing pattern of the photographing apparatus, and such key is provided on the manipulation key window, and when the next menu key is selected, the

multichannel image driver loads and displays the succeeding frame on the display device and processes a function corresponding to the selected detailed photograph key.

The detailed photograph key includes menu keys capable of selecting and setting up an identifier for each camera, a white balance, a setter speed, and motion detection. More preferably, the detailed photograph key comprises: a preset key for selecting a mode [[that]] in which the photographing apparatus operates according to [[a]] set-up information with respect to a region corresponding to one of ordered numbers among the ordered number of [[a]] preset set-up information, the preset set-up information ~~which has~~ having been classified selectively by assigning the ordered numbers to respective detailed regions thereof according to an azimuth angle; a manipulation pattern operation key for operating the photographing apparatus in accordance with stored information about the manipulation of the basic photograph direction manipulation key manipulated by a user; and a scan key for operating the photographing apparatuses to consecutively photograph so as to correspond to the preset set-up information in accordance with the ordered number.

The detailed photograph manipulation key comprises: an auto pan key for driving a pan within a set-up pan angle; and a block set-up key for setting up an object, the ~~of which~~ movement of which with respect to [[an]] image information displayed on the image display window is to be detected[[,]] by appointing a block for some region in the image display window.

3. Please amend the first paragraph on page 6, lines 3-7, as follows:

A system set-up key is disposed on the manipulation key window. The multichannel image driver loads a set-up module window for supporting [[to]] the set up of a system when the system set-up key is selected on the display device. The set-up module window includes a window capable of selecting a directory for storing the received image in a memory of the user's computer, and an alarm capacity selection

window capable of setting up a remaining capacity alarm target value to generate an alarm signal when [[a]] the remaining memory capacity of the memory reaches a set-up value.

4. Please amend the paragraphs bridging pages 6-8, from line 14 on page 6 thru line 12 on page 8, as follows:

It is preferable that the user's computer ~~includes~~ include the multichannel image driver and a window operating system for supporting [[a]] multi-tasking for operating an application program stored in a memory, and that the multichannel image driver ~~is operated being~~ be supported by the window operating system.

To achieve these and other objects in accordance with the principles of the present invention, as embodied and broadly described, the present invention provides a security system, comprising: a multichannel image processor for selectively receiving image signals transmitted through a plurality of input channels and for outputting the image signals; and a computer [[being]] connected with said multichannel image processor through a communication interface, said computer having a multichannel image driver, said computer inputting the image signals outputted from said multichannel image processor; the multichannel image driver controlling [[a]] selection of at least one of the input channels in accordance with a selected set-up mode, supplying a main image display window displaying the inputted image signals to a main frame of a display device, supplying at least one manipulation key window displaying keys to the main frame of the display device, processing in accordance with the selected set-up mode, performing at least one ~~selected from among~~ of displaying the inputted image signals through the display device in accordance with the selected set-up mode and recording the inputted image signals in a memory in accordance with the selected set-up mode, the displayed keys being provided for the purpose of selecting the ~~selected~~ set-up mode and other modes, the main image display window and the at least one manipulation key window

being integrally displayed on the main frame of the display device.

To achieve these and other objects in accordance with the principles of the present invention, as embodied and broadly described, the present invention provides a multichannel image processor, comprising: a plurality of input channels for receiving image signals transmitted from a plurality of cameras; a plurality of memories for storing the image signals received by said plurality of input channels; a memory controller for selectively outputting the image signals, stored in said plurality of memories, in accordance with a control signal; a coding unit for coding signals ~~output~~ outputted from said plurality of memories, and for transmitting the coded signals through an image output terminal for a computer; and a main controller for controlling said memory controller in accordance with the control signal, the control signal being transmitted from the computer through a computer data communication terminal.

To achieve these and other objects in accordance with the principles of the present invention, as embodied and broadly described, the present invention provides an apparatus installed in a computer, comprising: a receiver [[being]] disposed in the computer to receive signals transmitted to the computer from an external device; and a multichannel image driver for outputting a channel selection signal to the external device through a set-up port according to a set-up mode, for displaying the signals [[input]] inputted through said receiver on a display device, for recording the signals [[input]] inputted through said receiver in a memory in accordance with the set-up mode, for displaying a main image display window, the main image display window displaying together on a main frame the signals [[input]] inputted through said receiver, and a manipulation key window for displaying keys for selecting a mode, and for processing, in accordance with a selected key, the selected key being one of the keys displayed by the manipulation key window.

5. Please amend the two paragraphs on page 10, lines 10-15, as follows:

FIG. 12A is a view showing [[a]] memory capacity consumed when image data is recorded into a record device, using a National Television Standards Committee (NTSC) method, by a multichannel image driver of FIG. 6 for a transmitted image; and

FIG. 12B is a view showing the memory capacity consumed by time when image data is recorded into a record device, using a phase alternating line (PAL) method, by the multichannel image driver of FIG. 6 for the transmitted image.

6. Please amend the first paragraph on page 11, lines 5-13, as follows:

Illustrative embodiments of the invention are described below. In the interest of clarity, not all features of an actual implementation are described. It will be appreciated that, in the development of any actual embodiment, numerous implementation-specific decisions must be made to achieve the developers' specific goals, such as compliance with system-related and business-related constraints, which will vary from one implementation to another. Moreover, it will be appreciated that such a development effort might be complex and time-consuming, but would nevertheless be a routine undertaking for those of ordinary skill having the benefit of this disclosure. Additionally, the embodiments disclosed can be combined, in accordance with the principles of the present invention, to form an embodiment that enhances the benefits of the present invention.

7. Please amend the two paragraphs on page 12, lines 2-15, as follows:

This security system employing the switching unit is established by contacting the switching unit 12 and the recorder/reproducer 14, which are exclusively used for the security system employing the switching unit, to the monitor 13 and the security cameras 11. However, each product is expensive because they are supplied to be exclusively used only for the security system. Thus, only some users, who have a greater need to watch

and secure the building that justifies the expenses for installing the system, purchase the security system. Consequently, it is difficult to lower the cost needed to establish the security system employing the switching unit, and the cost has become an obstacle to obtain a plentiful supply of users.

Most office-working environments have been changed to use computers for accomplishing jobs, and also the use of computers, which enable Internet communication at home, has been widely increased. Yet, if the monitor 13 and the recorder/reproducer 14, among the security systems, are installed in a working place with [[the]] electric devices, the practical usage rate is deteriorated, since some places for installing the devices should be allocated there. Moreover, when using other devices, the devices might have to be moved to change their positions.

8. Please amend the two paragraphs on page 13, lines 7-17, as follows:

Moreover, it is preferable that the multichannel image processor 30 [[has]] have separated input channels for receiving input signals and channels for communicating data to control the plurality of cameras 20 in regard to the plurality of cameras 20. A wireless communication or a communication by wire can be used for the data communication, and it is preferable that the data communication by wire applies an RS-485 interface mode, which has a ~~little~~ small decay rate for a long distance.

A more detailed description will be [[done]] given hereinafter by referring to FIG. 3. [[The]] FIG. 3 is a block diagram showing one preferred embodiment of the multichannel image processor of FIG. 2[[,]] according to the present invention. Referring to FIG. 3, the multichannel image processor 30a has an input channel port 31, a plurality of analog-to-digital (A/D) converters 33, a coding unit 37, a central processing unit (CPU) main controller 39, a memory controller 41, an RS-232 interface (I/F) module 43, and an RS-485 interface (I/F) module 44.

9. Please amend the paragraphs bridging pages 13-16, from line 21 on page 13 thru line 9 on page 16, as follows:

Preferably, [[each]] input ~~channel~~ channels (IN) 31a1, 31b1, 31c1, and 31d1 have output terminals (OUT) 31a2, 31b2, 31c2, and 31d2, respectively, which are branched off from the input channels 31a1, 31b1, 31c1, and 31d1, respectively, to output the image signals transmitted from the cameras [[20]] 20a, 20b, 20c and 20d, respectively, as signals for separate apparatuses by branching off the signals. ~~Numbers~~ Reference characters Ch1 through Ch4 [[is]] are given for more convenient description [[for]] of the image output [[line]] lines of ~~each camera~~ cameras 20a, 20b, 20c, and 20d, respectively.

Only four input channels 31a1, 31b1, 31c1, and 31d1 are shown to avoid the complication of the figure, but the number of input channels can be extended. The A/D converters 33a, 33b, 33c, and 33d are disposed for each input channel 31a1, 31b1, 31c1, and 31d1, and convert transmitted analog signals into digital signals. The A/D converters 33 can be omitted[[,]] when the multichannel image processor 30a supports a digital camera.

The ~~memory 35~~ memories 35a, 35b, 35c and 35d (FIG. 3) temporarily ~~stores~~ store the image signals transmitted from the input channels ~~disposed~~ corresponding to each input channel 31a1, 31b1, 31c1, and 31d1. The ~~memory 35~~ memories 35a, 35b, 35c and 35d can be called [[a]] frame ~~buffer~~ buffers.

The memory controller 41 selectively controls the ~~memory 35~~ memories 35a, 35b, 35c and 35d in accordance with a channel control signal, and outputs [[the]] memory data to the coding unit 37. In other words, if [[it]] there is a four-division display mode, the memory controller 41 controls the ~~memory 35~~ memories 35a, 35b, 35c and 35d so that the data transmitted to the memory [[35]] of each channel can be consecutively ~~output~~ outputted for each frame, and if [[itis]] there is a single mode, the memory controller 41 controls the ~~memory 35~~ memories 35a, 35b, 35c and 35d to continuously output only the data transmitted to the memory [[35]] of a selected channel or selected channels.

The coding unit 37 encodes the image signals output from the selected memory [[35]] 35a, 35b, 35c or 35d, and outputs the coded signals through a video 2-output port 47, which is an image output terminal for the user's computer 50. The encoding method of the coding unit 37 can [[apply]] be any of various methods[[,]]. ~~for~~ For example, it can be a method of separating the data for colors and encoding the data.

A multiplexer 45 is disposed between [[the]] each input channel 31a1, 31b1, 31c1, and 31d1 and video 1-output port 46 in order to consecutively switch the input channel 31a1, 31b1, 31c1, and 31d1 in accordance with a set-up order. ~~Here, the~~ The video 1-output port 46 is a terminal for transmitting an image, generated by being switched in turn ~~for the~~ between channels by the multiplexer 45, to another external apparatus or ~~displayer~~ display unit (not shown) different from the user's computer 50. Therefore, the video 1-output port 46 can be used when the user wants to divide the image transmitted from the plurality of cameras [[20]] 20a, 20b, 20c and 20d into four on a screen of the display device in a working ~~circumstance~~ environment different from the user's computer 50.

An alarm sensor 60 can ~~use each~~ be any kind of ~~sensors known as sensors~~ device for sensing an abnormality in the region of the object to be watched [[of]] by the cameras [[20]] 20a, 20b, 20c and 20d. For example, a contacting or non-contacting sensor for sensing the opening/closing of a door, a heat sensor using a heat sensing method for sensing the entrance of a person, a motion sensor for detecting motion of a person, and a piezo-electric sensor for sensing [[the]] damage or shock by being attached [[on]] to a window can be applied as the alarm sensor 60. In addition, an infrared sensor, a magnetic sensor, etc. can be applied as the alarm sensor 60 according to the ~~attribute~~ type of [[the]] object being watched.

A user can utilize the present invention to designate (or select) one or more cameras to be associated with a particular alarm sensor. Then, when that particular alarm sensor is activated, video images from the designated camera or cameras can be automatically recorded and displayed. The ~~locations~~ location of the designated ~~cameras~~ camera(s) is independent of the location of the alarm sensor. Thus, the designated

~~cameras~~ camera(s) can be physically near the region of the alarm sensor, or the designated ~~cameras~~ camera(s) can be physically distant from the region of the alarm sensor.

For example, if a first alarm sensor is set to detect when an important door opens, a user can select three cameras to be associated with an alarm signal from that first alarm sensor. The three cameras could include a first camera positioned to allow a user to view a front side of the important door, a second camera positioned to allow the user to view a back side of the important door, and a third camera positioned to allow the user to view any people who travel down a hallway that is near a room with valuable items, [[and]] where the hallway is 100 meters from the important door. In response to the alarm signal from the first alarm sensor, image signals from those three cameras can be sequentially recorded, or displayed, or recorded and displayed, for a predetermined amount of time.

10. Please amend the paragraphs bridging pages 16-17, from line 20 on page 16 thru line 21 on page 17, as follows:

If an abnormality signal is transmitted from the alarm sensor 60, the main controller 39 transmits the received abnormality signal ~~receive~~ information to the user's computer 50, and controls the memory controller 41 so that a channel can be selected ~~corresponding~~ in correspondence to an alarm channel select mode ~~replied~~ forwarded from the user's computer 50 for the generation of the abnormality signal.

The RS-232 interface module 43 communicates data between the main controller 39 and the user's computer 50, and comprises a computer data communication terminal for connecting. The RS-485 interface module 44 supports data communication for controlling the operation of the cameras 20 connected [[with]] to the main controller 39 through the input channels 31a1, 31b1, 31c1, and 31d1, respectively. The RS-485 interface module 44 has a camera communication terminal.

~~A reference~~ Reference numeral 42 [[is]] identifies an electrically erasable

programmable read only memory (EEPROM) having various data including a starting program. The cameras 20 comprise an interface module 24, a camera controller 21, a camera drive unit 22, and a photograph unit 23.

The photograph unit 23 converts the signals photographed through a lens into electric image signals, and transmits the electric image signals through camera controller 21 to one input channel selected among the plurality of input channels 31a1, 31b1, 31c1, and 31d1 ~~through the camera controller 21~~.

The camera drive unit 22 can drive the photograph unit 23 ~~corresponding~~ in correspondence to supported functions such as pan, tilt, and zoom in/out, and controls the driving of the photograph unit 23 according to a control signal input from the RS-485 interface module 44 through the camera controller 21. In the preferred embodiment of the present invention, to avoid [[the]] complication of the figure, ~~it has been illustrated that~~ only one camera 20 is shown as connected [[with]] to the RS-485 interface module 44, but a plurality of cameras 20 can be connected in parallel with the RS-485 interface module 44, and the communication with the set-up cameras 20 is performed by using an identifier ~~set up differently~~ which is different for each camera.

11. Please amend the three paragraphs on page 18, lines 5-13, as follows:

The cameras 20 communicate data through the RS-485 interface module 44, and the photographed image signals are transmitted to the input ~~channels~~ channel port 31 through a separate output terminal.

On the other hand, the multichannel image processor [[30]] 30a can be constructed to perform wireless communication with the cameras 20 ~~unlike~~ in contrast to the wired communication method ~~by wire such as~~ using the RS-485 interface module 44.

FIG. 4 is a block diagram showing another preferred embodiment of the multichannel image processor of FIG. 2[[,]] according to the present invention. ~~The elements~~ Elements having the same functions as [[the]] elements shown in FIG. 3 are

given the same reference numerals.

12. Please amend the four paragraphs on page 19, lines 3-15, as follows:

The input device 55 includes a mouse 55a and/or a keyboard 55b (*see* FIG. 2). The communication device 58 includes an RS-232 interface module (not shown) for [[a]] serial communication.

An image signal input end (not shown) of the user's computer 50 receives image signals from the video 2 output port 47 of the multichannel image processor [[30]] 30a or 30b. It is preferable that a video graphic adaptor (VGA) card (not shown) be used for processing those image signals.

An operating system (O/S) 57[[,]] for supporting a window system, such as ~~window~~ Microsoft Windows 98, ~~window~~ Microsoft Windows 2000, ~~and linux~~ or LINUX, is disposed in the memory 56. A multichannel image driver 70, which is an application program for [[an]] image security, is installed in the memory 56.

The multichannel image driver 70 is programmed to process the signals transmitted from the plurality of cameras 20 ~~by being supported~~ as a result of support from the operating system 57, and ~~control~~ controls the multichannel image processor 30 and the cameras 20 in a window system. The multichannel image driver 70 can be offered in a form recorded [[in]] on a recording medium, so that the multichannel image driver 70 can be installed in a ~~desired~~ user's computer as desired.

13. Please amend the paragraphs bridging pages 19-20, from line 21 on page 19 thru line 12 on page 20, as follows:

FIG. 6 is a block diagram showing [[a]] the multichannel image driver of FIG. 5. As shown in FIG. 6, the multichannel image driver 70 comprises a transmitter 71, a

controller 72, a display unit 73, and a module support unit 74. The transmitter 71 receives the signals transmitted from the multichannel image processor [[30]] 30a or 30b through the communication device 58, and transmits the signals to be transmitted from the controller 72 to the multichannel image processor [[30]] 30a or 30b through the communication unit 58.

The module support unit 74 comprises various operation modules for offering a main frame when the multichannel image driver 70 is operated and screens loaded ~~corresponding~~ in correspondence to the selected key, and for performing a function corresponding to an offered menu ~~by being controlled by~~ under the control of the controller 72. There are a system set-up window, a main frame, a succeeding frame, a separated image display window, a recorded memory capacity/remaining memory capacity calculate module of the memory 56, and a recordable time calculate module, as examples of the operation modules, and the above-mentioned modules are described later on. The display unit 73 displays information about an object to be displayed through the display device 54 ~~by being controlled by~~ under the control of the controller 72.

14. Please amend the paragraphs bridging pages 20-21, from line 15 on page 20 thru line 6 on page 21, as follows:

FIG. 7 is a view showing a main frame displayed by [[a]] the multichannel image driver of FIG. 6 through a display device. The main frame is offered through the display device when the multichannel image driver 70 is operated. Referring to FIG. 7, the main frame 80 is displayed on a screen 54a of the display device 54. The main frame 80 comprises a main image display window 81, and a manipulation window 100, 110 having a plurality of keys displayed in regions plurally divided.

The main image display window 81 is a window for displaying transmitted image information as a four-divided screen or as one screen in accordance with a display mode. The manipulation window comprises a first key box 100 disposed at a lower end, and a

second key box 110 disposed at a right side. The keys in the key boxes 100 and 110 are used to select features of the security system.

A power key 101, disposed [[at]] in the first key box 100, is used when unloading the screen, which means finishing the operation. The power key 101 is a key for performing the same function as the close button illustrated at reference numeral 85, which is a familiar feature in the window system.

15. Please amend the paragraphs bridging pages 21-23, from line 10 on page 21 thru line 16 on page 23, as follows:

An open key (OPEN) 103 is a key to be used when reproducing a recorded file. When the open key 103 is selected, the controller 72 controls the module support unit 74 so that the desired file is easily selected, and loads a file select support window 303 as shown in FIG. 11. FIG. 11 is a view showing a module ~~offered by being~~ loaded and displayed when an open key of FIG. 7 is selected. The file select support window 303 offers a condition select menu 305, and a record file list display window 307 for listing [[up]] the recorded files in accordance with a selecting condition.

The condition select menu 305 includes a menu for selecting the type of the recorded image file (an alarm record, a user record, and a camera number select window), and a menu for setting a date section of the image file that the user wants to find. ~~Here, the~~ The alarm record is an image file recorded when the alarm mode is operated, and the user record is an image file recorded when the user pushes a record key. The camera number select window is a window to be used when looking up recorded files only corresponding to the entered camera number.

A look-up key 306 searches files corresponding to the selected menu from the memory 56, and lists the searched files. The record file list display window 307 has a window for supporting search of a folder, and a window for listing [[up]] the recorded file according to the selected condition. Preferably, the list offers information on the

files corresponding to listed items such as a record date, a record mode (an alarm mode and a user mode), a camera number, a fps (frame per second) value, and a file name. The file name is automatically created when the user pushes the record key, or when recording for a predetermined time is automatically performed ~~by being judged by~~ as a result of a determination of the alarm mode. Preferably, [[the]] a file [[name]] is named so that the user easily recognizes recording information, for example, the record date, the camera number, the record mode, and a coding method, etc., through the file name. For example, if an image of a camera number 5 recorded 2001 July 4th p.m. 1 o'clock 47 minutes 14 seconds is a file of the first screen recorded as a Joint Photographic Experts Group (JPEG) method [[as]] when the user selects the record key, the controller 72 creates the file name as 20010704134714_CAM05_user_01.MJPEG. In the above file name, for a file name recorded by the alarm mode, the part addressed as user is replaced by alarm, which shows that the file is recorded by the alarm mode.

According to the above method for creating, naming, and ~~supporting to read~~ reading files of the multichannel image driver 70, the user can find an image that he/she wants to see without any difficulty, and the time for searching files will be decreased.

Referring back to FIG. 7, the second key box 110 has a window for inputting the number of a camera, and a key (SEL) for selecting when the user wants to see the image of the camera corresponding to the [[input]] inputted camera number. If the SEL key is selected, the multichannel image driver 70 processes the image transmitted from the camera [[of]] having the [[input]] inputted number to be displayed on the main image display window as a full screen. Reference numeral 111 is a system set-up key.

FIG. 8 is a view showing a set-up module window ~~offered by being~~ which is loaded when a system set-up key of FIG. 7 is selected. FIG. 8 is a view showing a system set-up module window, which is loaded ~~by being~~ and supported by the module support unit 74[[,]] when the system set-up key 111 is selected. As shown in FIG. 8, the system module set-up window 211 offers menus for selecting a communication set-up 220, a camera set-up 230, an alarm set-up 240, and a video set-up 250. The window 211 is

displayed when the set-up mode is selected or requested. The set-up mode is selected or requested when the set-up key 111 is selected.

The communication set-up menu 220 offers a menu for setting up a port to communicate with the multichannel image processor 30. The camera set-up menu 230 offers a menu for setting up a camera having one number in the range from 0 to 255 [[of]] among the plurality of cameras 20 connected [[with]] to the input channels of the multichannel image processor 30. The camera set-up menu 230 offers [[also]] a menu for setting up a sequence maintenance time for each channel adjustable in one-second increments, from one second to 30 seconds. The range of numbering of the cameras and selecting the sequence maintenance time is not limited to the above-mentioned preferred embodiment.

16. Please amend the paragraphs bridging pages 23-25, from line 20 on page 23 thru line 19 on page 25, as follows:

The video set-up menu 250 offers a menu for setting up a directory to record the image displayed through the image display window 80, and a disk limit alarm item for setting up to alarm when the remaining capacity of the memory 56 reaches a certain percent of the entire capacity. The video set-up menu 250 also offers a menu for stopping the recording[[,]] when the memory capacity reaches the ~~set-up aimed~~ capacity set through the disk ~~limitation~~ limit alarm item, or for compressing and storing the image with a set-up coding method, for example, JPEG, wavelit, or Moving Picture Experts Group (MPEG).

[[For]] As one example, the memory capacity[[,]] consumed by time in accordance with the number of ~~frame~~ frames per second and the attribute of the image data ~~in regard~~ with respect to the degree ~~ofthe~~ of movement, a National Television Standards Committee (NTSC) method and a phase alternating line (PAL) method are shown in FIG. 12A and FIG. 12B, [[when]] wherein the coding method for the record is set up as the

motion JPEG coding method. FIG. 12A is a view showing a memory capacity consumed when image data is recorded [[into]] on a record device using the National Television Standards Committee (NTSC) method by [[a]] the multichannel image driver of FIG. 6 for a transmitted image. FIG. 12B is a view showing the memory capacity consumed by time when image data is recorded [[into]] on a record device using the phase alternating line (PAL) method by the multichannel image driver of FIG. 6 for the transmitted image.

The recordable time is [[for]] provided so that the remaining capacity ~~in the entire capacity~~ of the memory 56 can be calculated by setting up [[a]] basic data for the memory capacity per frame based on the basic data.

In addition, the video set-up menu 250 has a window for setting up a frame capture rate per second, [[and]] for displaying a recordable time in the memory 56 when applying the present record rate, and for setting up the storing date of the recorded files.

Referring back to FIG. 7, if one key among four camera select keys located next to the system set-up key 111 is selected, the selected key processes the display mode for displaying the image of only the corresponding camera 20. Reference numeral 116 is a key for dividing the image display window 81 into four, and for displaying the image transmitted from four cameras 20 after dividing the image into four. Reference numeral 117 is a key for consecutively displaying the image signals as a full screen on the image display window 81 for the order of the cameras corresponding to the set-up pattern. Reference numerals 118 through 121 are keys for setting up a mode for displaying the image after freezing the image of the corresponding cameras in the four-divided display mode. In other words, if the reference numeral 119 is selected, the images of the camera numbers 1, 3, and 4 are consecutively displayed ~~in regard~~ with respect to the transmission to the divided regions corresponding to the four-divided screens, and, in the image displaying region for the camera number 2 among the four-divided screens, the present image of the camera number 2 is frozen and continuously displayed. Reference numeral 122 is a key for [[using]] use when lifting the alarm mode operated in accordance with the transmission of the alarm signal.

Reference numeral 130 is an ~~az imuth~~ azimuth marking window, and there is azimuth guide information such as up, down, right, and left displayed therein for guiding the photograph adjust direction based on a round point in the center.

A ball mark 131, indicated as a ball type at the round point in the azimuth mark window 130, is a photograph direction manipulation key, and if the key is not selected, the ball mark 131 is placed at the round point.

17. Please amend the paragraph bridging pages 26-27, from line 21 on page 26 thru line 4 on page 27, as follows:

On the other hand, when the key associated with reference numeral 107 is selected, a succeeding frame is presented, as shown in FIG. 9. The key associated with reference numeral 107 is the next key 107. [[The]] FIG. 9 is a view showing a succeeding frame offered when a next key 107 of FIG. 7 is selected. The elements having the same functions as the previous figures have been ~~numbered as~~ identified with the same reference numerals.

18. Please amend the paragraph bridging pages 27-28, from line 18 on page 27 thru line 3 on page 28, as follows:

When a user selects the menu key 261 in the third key box 260, the screens that are loaded are: a screen for setting conditions about white balance, shutter speed, and motion detection function; a screen for setting a range of angle of auto pan; a screen allowing a user to give numbers to each of the regions divided ~~in regard~~ with respect to the 360° of the azimuth angle and setting zoom in/out according to the numbers given to the regions (thus setting information required for execution of preset key 262 and scan key 264); and a screen for setting conditions corresponding to the execution of the sub-menu key.

19. Please amend the paragraphs bridging pages 29-30, from line 6 on page 29 thru line 21 on page 30, as follows:

If a menu key 261 is clicked, the menu key 261 ~~supports to set~~ sets up in advance what is needed to operate the functions of the detailed photograph manipulation keys that will be described later on. Preferably, the menu key 261 ~~supports to select~~ selects and [[set]] sets up an identifier for each camera, white balance, shutter speed, and motion detection. If the menu key 261 is selected, a corresponding module program of the module support unit 74 is loaded.

The set-up item supported by the menu key 261 ~~is being corresponded~~ corresponds to the operation key, which will be described later on, and the set-up support will be explained using a key also described later on.

A preset key 262 is a key for selecting a mode for a photographing operation[[,]] in accordance with preset set-up zoom in/out information. The preset set-up zoom in/out information is used by the photographing apparatus in order to photograph the region corresponding to one ordered number among the zoom in/out preset set-up information, which is set up after being selectively divided by giving numbers to each region plurally divided ~~in regard~~ with respect to the azimuth angle. The preset set-up information can set up zoom in/out about the 128 regions plurally divided ~~in regard~~ with respect to the azimuth angle by using the menu key 261 and a corresponding zoom in/out key. The set-up zoom in/out information can be described as set-up zoom information. The preset set-up zoom in/out information can be described as preset set-up zoom information.

If the user wants the camera to photograph with one preset set-up number among the preset set-up information, the user selects the preset key 262, ~~and then~~ inputs the preset set-up number into a number input window below, and then clicks an enter key (an arrow is indicated in a box) disposed beside[[,]]. [[then]] Then, the camera is controlled to photograph in the set up zoom in/out status ~~in regard~~ with respect to the azimuth angle of the corresponding number.

A manipulation pattern key 263 is a key for operating the camera in accordance with a stored pattern for a certain manipulation of the basic photograph direction manipulation key. ~~Here, if~~ If a pattern memory is set up using the menu key 261, the manipulation pattern memory stores the pattern information about the manipulation of the basic photograph direction manipulation key for a predetermined time, *e.g.*, 30 seconds. Preferably, whenever storing the manipulation pattern, the menu key 261 ~~supports to give~~ gives an identification number. In this case, as described before, after the manipulation pattern operation key 263 is selected, if an identification number of a desired manipulation pattern is entered, and the enter key is clicked, the camera is controlled so as to be operated in accordance with the stored manipulation pattern.

A scan key 264 is a key for commanding ~~to sequentially photograph~~ the sequential photographing of regions corresponding to the preset set-up information, according to ordered numbers, by using the menu key 261. In other words, when the preset ordered numbers are set up from 0 to 5, if the scan key 264 is selected, then the scan key 264 controls the camera to photograph the regions in a sequence corresponding to the ordered numbers from 0 to 5 ~~sequentially~~ by adjusting the zoom in accordance with the corresponding zoom information. The zoom information can be described as preset zoom in/out set-up information.

20. Please amend the two paragraphs on page 31, lines 6-14, as follows:

An auto pan key 265 is a key for consecutively operating pan drive in the region of an auto pan angle set up by using the menu key 261. For example, if the auto pan key 265 is clicked, when the auto pan angle is set up for 0 to 90 ~~degree~~ degrees, then the pan drive is processed to consecutively operate only in the region of 0 to 90 degrees.

A reset key 266 is used to reset the set-up information. A block set-up key 267 ~~supports to set~~ sets up a desired block[[,]] when partly detecting the movement of the image information displayed through the main image display window 81 after setting up

the block for some region in the full screen. The set-up corresponding to the operation of the detailed photograph manipulation key is performed by using the menu key 261.

21. Please amend the paragraphs bridging pages 31-33, from line18 on page 31 thru line 6 on page 33, as follows:

FIG. 10 is a view ~~showing~~ of a size variable separated image display window offered when [[a]] the separation key of FIGs. 7-9 is selected. As shown in FIG. 10, if the separation key 83 is selected, a separated image display window 183 is loaded. If the user adjusts an edge of the window 183 by dragging or dropping the mouse 55a, then the size of the window 183 is adjusted, and the size of the image is also enlarged and reduced. At this [[time]] point, the image is processed so as not to be displayed on the main image window 81.

The controller 72 operates so as to ~~be corresponded~~ correspond to the manipulation of the keys described so far by controlling the module support unit 74, [[a]] display unit 73, and [[a]] transmitter 71 under the support of the operating system 57.

The multichannel image driver 70 can be loaded as an inactive window when the user wants to use a word processor by loading the document edit application program.

Furthermore, there is a key 82 for setting up for the loading position of the [[frame]] frames 80 and 180 currently activated [[of]] by the multichannel image driver 70[[,]] when the user loads an application program besides the multichannel image driver 70. The following example is provided in order to further explain the key 82 shown in FIG. 7. Let us suppose that the key 82 is selected, and then a user executes a text editor program (such as notepad, wordpad, or Microsoft Word). Among the several windows that are open on the display screen of the computer, the upper-most window becomes the main frame 80, while the window immediately below the upper-most window becomes the window for the text editor program. Thus, the user can see all of the main frame 80, but can only see some parts of the text editor program window that are not hidden by the

main frame 80. The key 82 relates to a window viewing method which enables a user to edit a document (or perform other tasks) while the security mode is performed as the main job.

As described so far, ~~according to~~ in the multichannel image processor 30 and the security system employing the same, a desired security system can be established if a record medium having the multichannel image driver 70 is installed in a computer 50, and ~~connecting~~ the multichannel image processor 30 is connected between cameras 20 and the computer 50. Accordingly, the rate of utility for resources will be increased, ~~and a~~ separate work using the computer can be performed while watching an object, and the cameras can be remotely controlled.

Moreover, since the image information and the manipulating apparatuses are offered together on the display device of the computer 50, the user can ~~manipulate for watching~~ watch or ~~recording~~ record desired image information by using an input device familiar to the user ~~him/herself~~.